CERTIFIED MAIL #7015 0640 0006 6786 2471
RETURN RECEIPT REQUESTED

STATE OF TENNESSEE
TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
JOHNSON CITY ENVIRONMENTAL FIELD OFFICE
2305 SILVERDALE ROAD
JOHNSON CITY, TENNESSEE 37601-2162
(423) 854-5400 STATEWIDE 1-888-891-8332 FAX (423) 854-5401

October 8, 2015

Mr. Wendell Christian
General Manager
Aerojet Ordnance Tennessee
1367 Old State Route 34
Jonesborough, TN 37659

RE: **Compliance Evaluation Inspections (CEIs)**
Aerojet Ordnance Tennessee (AOT)
NPDES Permit TN0057983
TMSP TNR051099
Washington County

Dear Mr. Christian:

During the period from August 31, 2015, through September 3, 2015, Tennessee Department of Environment and Conservation, Division of Water Resources personnel performed planned Compliance Evaluation Inspections at the above referenced facility. During the inspections, compliance with individual NPDES permit TN0057983 and Tennessee Storm Water Multi-Sector General Permit for Industrial Activities (TMSP) TNR051099 was evaluated. The primary site representatives during the inspections were Mr. Benny Cole, Mr. Tim Wright, and Mr. Pepper McCary. The division thanks these and other Aerojet personnel for their assistance during the inspections. In addition to the items below, also see the enclosed ICIS NPDES Facilities Inspection Reports and outfall observations for further information.

I. Permit

Evaluation of the Aerojet Ordnance Tennessee facility during the inspections appeared to indicate that it was consistent with the descriptions in existing facility permits. The nature of facility discharges also appeared to be generally consistent with permitted constituents in permit Part I A. Field observations did reveal some permit deficiencies or items of concern as noted below.

1. Observation of the three air compressors on the south side of building 200 revealed that drainage from the containment pans underneath two of the compressors had been contained for proper disposal in response to a deficiency noted during a 2013 site compliance inspection by the Division. However, the discharge line from an Ingersoll Rand compressor containment pan still appeared to be open and capable of discharging stormwater or condensate potentially

contaminated with oily residue to the onsite sanitary wastewater treatment plant, which discharges via outfall 003. As noted during the 2013 inspection, discharge of oily water to the sanitary treatment plant is not consistent with the contributing flows noted for this outfall in the AOT NPDES permit TN0057983 application and may cause treatability problems at the treatment plant. Division representatives noted that the compressor did not appear to be in use at the time of inspection; however, discharge of oily water to the sanitary sewage treatment plant is not consistent with current NPDES permit TN0057983 conditions and must be eliminated or the permit modified to include any applicable additional limits for outfall 003 before this material may be sent to the treatment plant.

II. Records/Reports

Selected records and reports, including logbooks, bench sheets, chains-of-custody, laboratory reports, and monthly Discharge Monitoring Reports (DMRs), from calendar years 2014 through 2015 were evaluated during the inspections. Various portions of NPDES permit TN0057983, including Part I A., Part I B., and Part III, contain monitoring, reporting, and documentation requirements. In addition, records documenting laboratory analyses, including proper quality assurance and quality control (QA/QC), must be maintained to satisfy permit Parts I B.3. and II A.4. Deficiencies pertaining to applicable requirements are summarized below or in other pertinent areas of this report.

1. A contract laboratory, ALS Environmental, performs several of the analyses required for NPDES compliance monitoring purposes at the AOT facility. Review of selected records revealed that the reports received from ALS do not clearly indicate which revision of ammonia (as N) analysis method EPA 350.1 was used. According to Title 40 CFR Part 136.3 Table IB, the currently approved version of this method is EPA 350.1, Revision 2.0 (1993). NPDES permit TN0057983 Part I B.3. requires analysis procedures conform to Title 40 CFR Part 136 specifications.

2. Examination of chain-of-custody documentation for samples delivered by Mr. Benny Cole to Mr. Tony Ellis for analysis in the building 300 laboratory revealed short gaps between the time samples were relinquished and received. The noted time gaps appeared to be shorter than those noted during the 2013 compliance inspection at AOT, but some deficiencies still remained. As noted in 2013, gaps in times of possession break the established sample chain-of-custody, raise concerns about sample integrity, and are not consistent with appropriate sample handling as discussed in such consensus body standards as *Standard Methods for the Examination of Water and Wastewater* Method 1060 B-2011 2.d.

3. Available documentation indicated the analytical method used onsite for conductivity analysis as Hach 8160. This method is not one approved for use in Title 40 CFR Part 136 as required by NPDES permit TN0057983 Part I B.3. However, review of this method revealed it is purportedly based on *Standard Methods for the Examination of Water and Wastewater* Method 2510 B, the currently approved version of which is Standard Method 2510 B-1997. AOT laboratory documentation must be updated to reflect an approved method referenced in Part 136, and standard operating procedures must be revised as necessary to ensure that all approved method procedural and QA/QC requirements are met.

4. Review of monitoring records for January 2015 revealed that outfall 002 effluent daily maximum and monthly average flows reported on the monthly Discharge Monitoring Report were not correct. A revised DMR showing the correct values must be submitted.

5. The logbook used to record outfall 003 effluent analysis results contained a number of incomplete or outdated analytical method references. In accordance with permit requirements, methods approved for use in Title 40 CFR Part 136 must be used. Records must reflect use of approved methods.

III. Facility Site Review, Self-Compliance Program, and Operations & Maintenance

Part II A.4. of NPDES permit TN0057983 contains requirements for proper operation and maintenance of facilities and systems, and these inspections included walk through evaluations and field observations of various areas, including the onsite sanitary sewage treatment plant, manufacturing areas, and facility outfalls. The site condition generally appeared good, and AOT appeared to have a number of programs, resources, and personnel dedicated to proper operations and maintenance and regulatory compliance. A few deficiencies in these program areas were noted during the inspections as discussed below or in other pertinent sections of this report.

1. NPDES permit TN0057983 covers discharges of non-contact cooling water from the AOT facility via outfall 002. Observation of the cooling tower at the south end of building 500 on September 1, 2015, revealed a leak on piping serving the tower was discharging onto the ground under the unit. This leak must be repaired to eliminate the discharge. The division recommends the cooling system piping receive diligent maintenance in order to prevent further unpermitted discharges.

IV. Effluent/Receiving Waters

All NPDES TN0057983 outfalls and TMSP TNR051099 stormwater outfalls were observed during the inspection. All outfalls were accessible, and signage required by NPDES permit TN0057983 was posted. Outfall observations are summarized in a separate enclosure.

V. Flow Measurement

NPDES permit TN0057983 Part I A. requires reporting of effluent flow at various frequencies. Reported flows for outfall 001 (1/discharge) were based on tank levels in the batch treatment process. Flows for outfalls 002 (2/month) and 003 (continuous) were measured using v-notch weirs and ultrasonic level sensors. The inspections included evaluation of the flow measurement equipment and procedures, which generally appeared adequate. Available records indicated calibration checks for outfalls 002 and 003 approximately semi-annually. The following deficiency was noted with flow measurement procedures.

1. Calibration checks of ultrasonic flow meter readings versus stage gauges in place at outfalls 002 and 003 should include verification of indicated flow depths as well as flow rates. These checks must be clearly documented. As detailed in the United States Environmental Protection Agency *NPDES Compliance Inspection Manual* (EPA 305-X-04-001, July 2004), flow measurements

should be within ±10% of actual flow. Flow meter calibration should be checked frequently, but at least once per year.

VI. Laboratory

Part I B.3. of NPDES permit TN0057983 requires pollutant analyses be performed in accordance with methods specified in Title 40 CFR Part 136, and permit Part II A.4. requires adequate laboratory controls and appropriate quality assurance procedures. Revisions to Part 136, effective June 18, 2012, explicitly detail required laboratory quality assurance and quality control (QA/QC) components. The majority of the laboratory analyses necessary for NPDES compliance reporting at the facility were being performed by commercial contract laboratories; however, a limited number of required analyses were still being performed onsite by AOT personnel. Copies of the most recent Division guidance documents detailing appropriate QA/QC for common analysis methods were provided to Mr. Cole during this inspection and are available online at http://www.tn.gov/environment/article/wr-ftc-waste-water-information. These guidance documents were developed by the division in conjunction with EPA Region 4 personnel to help NPDES permitted facilities ensure regulatory compliance. Aerojet Ordnance must revise standard operating procedures (SOPs) as necessary to address all required QA/QC components. A number of deficiencies were noted with onsite laboratory procedures as detailed below.

1. Mr. Benny Cole indicated that current AOT Work Instructions covering SOPs for sampling and analysis generally reference Title 40 CFR Part 136 for information about analytical methods. In accordance with NPDES permit TN0057983 Part I B.3. and Title 40 CFR Part 136.7 requirements, written laboratory SOPs must incorporate all the required components of analysis procedures and applicable QA/QC. The SOPs must include details describing the specific analysis procedures and equipment employed by AOT personnel.

2. Onsite analyses for effluent pH did not include continuing calibration verification (CCV). This is an element of laboratory QA/QC required by Title 40 CFR Part 136. In addition, no duplicate readings for pH were performed. The Division considers duplicates a required element of proper QA/QC as delineated in the guidance documents provided to Mr. Cole during the inspections and available on the Fleming Training Center website.

3. Evaluation of procedures and documentation for instream and outfall 002 effluent conductivity analyses performed onsite revealed a number of deficiencies.

    a. No analyst demonstrations of capability (DOCs) had been performed and documented. This is a required laboratory QA/QC element for such analyses as discussed in Title 40 CFR Part 136.7 and the approved method SM 2510 B-1997.

    b. No duplicate analyses were performed for instream monitoring. Duplicates were routinely performed for outfall 002 analyses. The Division considers duplicates a required element of proper QA/QC.

    c. According to records examined during the inspections, conductivity CCVs performed using the 100±1 µS/cm standard frequently yielded results ≥103 µS/cm. The accuracy of the Hach conductivity probe used for these measurements was specified in the manufacturer's literature as ±0.5%. Thus, the high CCV values appeared to be well

outside the cumulative tolerance range. Guidance previously received by Mr. Cole from Hach Technical Support regarding a ±10% range before recalibration was necessary does not appear to be consistent with the reagent and equipment tolerances.

4. The thermometer used for instream, outfall 002 effluent, and outfall 003 effluent temperature measurements was last calibration checked by SIS on July 30, 2015, at 22.1°C and 90°C. However, some effluent measurements were below the lower calibration check point. As required by the approved method used for these analyses, Standard Method 2550 B-2000, the thermometer used must be periodically checked within the temperature range of use against a NIST-certified thermometer.

5. Review of laboratory records and discussion with Mr. Cole revealed that no duplicate temperature measurements were performed. The division considers duplicates a required element of proper QA/QC as delineated in the guidance documents provided during the inspections and available on the Fleming Training Center website.

6. Effluent Total Residual Chlorine (TRC) analyses performed onsite were missing a number of QA/QC elements required by Title 40 CFR Part 136.7 and the approved method used for the analyses, Standard Method 4500-Cl G-2000, and described in the Division QA/QC guidance documents for such analyses. This analysis procedure must include duplicate analyses, a laboratory fortified blank (LFB), and continuing calibration verification. In addition, any method detection limit (MDL) study and analyst demonstrations of capability (DOCs) must be redone because AOT was using a new meter.

7. Evaluation of procedures and documentation for dissolved oxygen analyses performed onsite also revealed a number of deficiencies. No analyst DOCs had been performed and documented, no daily instrument CCVs had been performed, and no duplicate analyses had been performed. All of these are required elements of laboratory QA/QC for such analyses as discussed in Title 40 CFR Part 136.7, the approved method used for the analyses, Standard Method 4500-O G-2001, and the division QA/QC guidance documents for such analyses.

8. Effluent samples and reagents were stored in a refrigerator in building 400 prior to analysis onsite or shipment to an offsite laboratory. A log of refrigerator temperature was kept, and the thermometer used for these readings was calibration checked twice per year. However, review of the records and discussion with Mr. Cole during the inspection revealed that the thermometer was not read correctly because of misinterpretation of the gradations. Accurate temperature readings must be recorded to demonstrate compliance with preservation requirements in Title 40 Part 136.

9. In accordance with EPA Region 4 and Division guidance, a number of E. coli analysis QA/QC steps must be performed more frequently than was noted during the inspection.

    a. Duplicate E. coli analyses must be performed monthly rather than every other month.

    b. IDEXX Quanti-Tray/2000 tray seal checks must be performed monthly rather than once per quarter.

    c. The UV lamp bulb(s) used for checking tray well florescence during E. coli analysis must be cleaned monthly rather than twice per year.

10. The IDEXX Quanti-Tray/2000 comparator tray available onsite had expired January 5, 2012. AOT should obtain a new comparator tray to aid correct differentiation of positive and negative tray wells when determining E. coli analysis results.

VII. Sludge Handling/Disposal

NPDES permit TN0057983 Part I A. contains requirements for proper disposal of sludge or any other material removed from any treatment works. Biosludge disposal from the AOT sanitary wastewater treatment plant was discussed during this inspection. According to Aerojet representatives, the biosludge is combined with sludges from process wastewater treatment, dewatered in a centrifuge, and placed in a burial box for disposal as radioactive waste. Mr. Tim Wright indicated such wastes were currently being hauled for disposal at Waste Disposal Specialists in Andrews, TX, but may again be disposed at Energy Solutions in Clive, UT in the future.

VIII. Pollution Prevention and Storm Water

As noted above, the AOT facility has coverage under TMSP TNR051099. Based on the nature of site operations, the requirements of TMSP Sectors F and AA apply in addition to the general permit requirements of parts 1. through 10. The inspections included observation of the site condition, control measures, and operations, and review of the latest facility Stormwater Pollution Prevention Plan (SWPPP), which had been prepared by Environmental Compliance Consulting Services, LLC (ECCS) and was signed and certified for AOT by Mr. Tim Wright on June 15, 2015. For additional information, also see the included TMSP Compliance Inspection Report. Deficiencies noted in these program areas are detailed below.

1. Based on the unavailable conditions status of the receiving water, Little Limestone Creek, with regard to nutrients and the Nitrate plus Nitrite Nitrogen (NO_3+NO_2) monitoring required by TMSP Sector AA Table AA-1, the requirements of TMSP part 4.6. apply to facility outfalls subject to this sector. Further, the additional monitoring requirements specified in TMSP part 1.2.3. for existing discharges into receiving waters with unavailable parameters also apply. Updates must be made to the facility SWPPP, including such items as inspection and monitoring frequencies, to address the requirements of these permit parts. In addition, a copy of the facility SWPPP must be submitted to the Division's Johnson City Environmental Field Office.

2. Some SWPPP modification timelines specified in section 2.4 were not consistent with requirements of TMSP parts 4.6., 11.F.3.2.4.2, and 11.AA.3.2.4.2

3. SWPPP section 3.8.4 did not reference the presence of ferric chloride onsite. This chemical is used for process wastewater treatment in building 400. TMSP parts 11.F.3.2 and 11.AA.3.2 require the SWPPP contain a description of potential pollutant sources and an inventory of potentially exposed materials.

4. Facility SWPPP section 3.10 referenced the building 300 foundry. Foundry operations have been moved to building 100.

5. Aside from the certification statement on the SWPPP itself, the statement on TMSP-related records did not include all language required by TMSP part 7.7.4. In accordance with TMSP part 7.7. and its subparts, all reports required by the permit must be signed and certified. This would include such items as the housekeeping inspection reports discussed in SWPPP section 4.2.1 and documented on form 080-99-122, in addition to other pertinent reports.

6. SWPPP section 4.4 did not correctly reflect the deadline for Annual Stormwater Monitoring Report submission specified in TMSP parts 11.F.5.2 and 11.AA.5.2. The SWPPP also incorrectly specified where the reports were to be submitted. Both of these requirements were revised in the new general permit effective April 15, 2015, coverage under which was reissued to AOT as TNR051099, effective May 28, 2015. Also, this SWPPP section referenced Environmental Assistance Centers. This term was changed to Environmental Field Offices (EFOs) several years ago.

7. Annual analytical monitoring of AOT stormwater outfalls was performed on May 21, 2015, but the required monitoring report had not yet been submitted to the Division. TMSP parts 11.F.5.2 and 11.AA.5.2 require the report be submitted to the local EFO 30 days after the sampling results are obtained.

8. Facility SWPPP section 4.4 indicated required annual stormwater monitoring for uranium and nickel, and this had been done in May 2015. However, neither of these parameters is a required monitoring parameter specified in TMSP Sectors F or AA, which are applicable to this facility. It was unclear at the time of inspection why this monitoring had been identified as a requirement.

9. During the site inspection, areas of erosion were noted at multiple locations throughout facility. As required by TMSP parts 11.F.3.2.2.1, 11.F.3.2.3.9, 11.AA.3.2.2.1, and 11.AA.3.2.3.7.4, erosion areas were noted in the facility SWPPP. The erosion appeared to be exacerbated by the use of herbicides around retaining walls, curbs, and paved areas. Some site inspections had also identified this concern, notably a report prepared by Haley & Aldrich, Inc. detailing an August 2015 inspection. TMSP parts 11.F.3.2.3.9 and 11.AA.3.2.3.7.4 contain requirements for identifying, implementing, and maintaining control measures to limit erosion.

10. The site inspection also revealed the presence of a sand pile on the paved lot west of building 500. This sand was used at the site to provide traction during winter weather. The facility SWPPP did not discuss the presence of this material onsite or discuss appropriate control measures to prevent its mobilization in stormwater runoff. In accordance with TMSP Sector F and AA requirements, this material and appropriate control measures must be discussed in the SWPPP. Alternately, AOT may wish to consider removing this material from the site.

IX. Additional Comments and Recommendations

Miscellaneous additional comments and recommendations noted during the inspections are discussed below.

1. Recent production increases and new product manufacturing onsite were discussed with AOT personnel. Note that changes in production level and/or processes should be communicated to the Division's permit section in a timely manner. NPDES permit TN0057983 Part II B.1. contains

requirements for notification of certain changes. The Division encourages proactive communication regarding facility operations in order to ensure correct permitting.

2. NPDES permit TN0057983 does not include requirements of the Title 40 CFR Part 433 Metal Finishing Point Source Category effluent limitations guidelines (ELGs) because AOT has indicated that all wastewaters subject to this category are evaporated onsite rather than discharged. In addition to any primary metal finishing operations performed onsite, note that another forty process operations are also subject to the category limitations. During the inspections, AOT representatives were uncertain whether any related testing operations performed onsite resulted in process wastewater discharges. Testing is one of the applicable process operations noted in the ELGs. AOT should carefully evaluate all onsite operations to ensure that no wastewater subject to this category is discharged. Modification to NPDES permit limitations would be necessary if this is not the case.

3. AOT has previously submitted a written delegation of signatory authority to Mr. Benny Cole and Mr. Tim Wright for certain permit-related documents. Now that the site has a new General Manager, the Division requests an updated signatory delegation be submitted.

4. Observation of the cooling tower on the west side of building 500 revealed a closed drain line leading to the ground adjacent to the tower containment area. If the tower is drained for maintenance or other purposes, the water must be contained and appropriately disposed, not allowed to discharge onto the ground. In addition, a valve on a PVC line serving the tower had a visibly cracked body. The valve was not leaking at the time of inspection, but AOT may wish to replace this valve before failure occurs.

5. A number of Aerojet Ordnance Tennessee procedures still reference analysis methods from *Standard Methods for the Examination of Water and Wastewater* by hard copy edition number. Because of changes in Title 40 CFR Part 136 some years ago, it is preferable to reference these methods by year of adoption (*e.g.*, SM 5210 B-2001). The adoption year information is available in the hard copy editions.

6. Inspection revealed that Mr. Cole had been plotting pH calibration points (standard buffer values versus meter calibration values) and checking the closeness of a linear regression fit to the data. However, this check appeared to provide little information regarding meter calibration because the data plotted was merely values input to the meter for the calibration points. Because of the limited utility of such a plot, it does not appear to be necessary.

7. A number of onsite analyses (*e.g.*, pH, conductivity, TRC, and dissolved oxygen) involve routine calibration verification checks and/or analysis of check standards. Each such check will have an associated acceptable tolerance. For clarity and ease of reference, the Division recommends AOT specify the applicable tolerances on the laboratory bench sheets.

8. Division personnel observed collection of instream biological and sediment samples, required by NPDES permit TN0057983 Part III H.2. and H.3., by Civil & Environmental Consultants, Inc. on July 16, 2015. The final report on the sampling event had not been received by AOT and submitted to the Division by the time of the inspections.

9. Observation of the site revealed the presence of open-top dumpsters for scrap sabots outside building 100, general garbage outside buildings 100 and 300, and scrap materials outside building 500. AOT may wish to consider switching to closed-top dumpsters as a control measure to prevent contact of stormwater with the materials in these dumpsters and possible mobilization of pollutants. The site inspection done by Haley & Aldrich, Inc. in August 2015 identified a similar recommendation. At a minimum, scrap industrial materials should be clean before placement in the dumpsters, and any discharges from the dumpsters should be closely monitored for signs of contaminants.

X. Conclusion

Compliance with NPDES permit and TMSP requirements helps ensure discharges that are protective of downstream fish and aquatic life and water quality. The division requests that you develop and submit, within 30 days of receipt of this correspondence, a detailed action plan and proposed implementation schedule addressing the numbered points discussed in sections I. through VIII. above. Thank you for your efforts to ensure permit compliance and to protect state water quality. If I may be of assistance in matters concerning this report, please contact me via telephone at (423) 854-5456 or via email at Bryan.Carter@tn.gov.

Sincerely,

Bryan B. Carter
Environmental Protection Specialist
Division of Water Resources
Johnson City Environmental Field Office

BBC/150115282

Enclosures

cc: Mr. Kevin Rice, DWR, Johnson City EFO
DWR Compliance and Enforcement Unit, Nashville
File Copy, DWR, Johnson City EFO

TDEC - Division of Water Resources
Johnson City Field Office

ICIS NPDES Facilities Inspection Report

Facility Data

NPDES ID: TN0057983

Facility Site Name: Aerojet Ordnance Tennessee

Address: 1367 Old State Route 34, Jonesborough, Washington County, TN 37659

Permit Eff. Date: Sep 1, 2012

Permit Exp Date: Dec 31, 2015

SIC Code: 3369, 3451, 3489, 3499

Compliance Monitoring Information

Compliance Monitoring Activity Name: Compliance Evaluation (non-sampling) (CEI)

* If Bio Monitoring is selected above, select the method used:

Compliance Monitoring Activity: Evaluation

Compliance Monitoring Dates/Times

Entry Date/Time (mm/dd/yyyy hh:mm): 08/31/2015 10:21

Exit Date/Time (mm/dd/yyyy hh:mm): 09/03/2015 14:55

Facility Representatives

Robert (Benny) Cole, Env. & Compliance Support 4, 423-753-1399
Timothy Wright, Manager, EH&S Generalist, 423-753-1323
Charles (Pepper) McCary, Senior Manager, EH&S Generalist, 423-753-1328
Tony Ellis, Senior Engineer, General, 423-753-1335
Ellen Shanks, Health & Safety Technician, 753-1241
Sandra Matthews, Administrative & Clerical Support, 423-753-1322

On-Site Representative(s)Title, Phone Number

Wendell Christian, General Manager, 423-753-1200

Responsible Official(s), Title, Phone Number

Statute and Section Information

Federal Statute: CWA - Clean Water Act

State Statute: Tennessee Water Quality Control Act

Programs: NPDES- Base Program (Limits, Reporting, & Schedule)

Compliance Monitoring Reason: Core Program

Compliance Monitoring Agency Type: State

Agency Name: TDEC - DWR

Did EPA assist/ Inspection? No

Time Physically conducting activity: Days: 4 Hours:

Inspection Type: State

Compliance Monitoring Action Outcome:

Lead Agency: State

Compliance Monitoring Rating Code: Unrated

If Joint Inspection, what was the purpose of the other party?

Areas Evaluated During Inspection (*Check only those areas evaluated*)

☒ Permit	☒ Self - Compliance Program	☐ Pretreatment
☒ Records / Records	☐ Compliance Schedule	☒ Pollution Prevention
☒ Facility Site Review	☒ Laboratory	☒ Storm Water
☒ Effluent / Receiving Waters	☒ Operations & Maintenance	☐ Combined Sewer Overflow
☒ Flow Measurement	☒ Sludge Handling / Disposal	☐ Sanitary Sewer Overflow

Compliance Monitoring Summary

Deficiencies noted in Permit, Records/Reports, Operations & Maintenance, Flow Measurement, and Laboratory.

EPA and State Representatives		
Inspector's Signature	TDEC - DWR / JCEFO / 423-854-5456 Agency / Office / Phone	Oct 8, 2015 Date
Manager's Signature	TDEC - DWR / JCEFO / 423-854-5462 Agency / Office / Phone	Oct 8, 2015 Date

(Note: This form can only be printed to an XPS document, then saved for later use.)

TDEC - Division of Water Resources
Johnson City Field Office

ICIS NPDES Facilities Inspection Report

Facility Data

NPDES ID:	TNR051099	Facility Site Name	Aerojet Ordnance Tennessee		
		Address	1367 Old State Route 34, Jonesborough, Washington County, TN 37659		
Permit Eff. Date:	May 28, 2015	Permit Exp Date:	Apr 14, 2020	SIC Code:	3369, 3451, 3489, 3499

Compliance Monitoring Information

Compliance Monitoring Activity Name	Compliance Evaluation (non-sampling) (CEI)
* If Bio Monitoring is selected above, select the method used:	
Compliance Monitoring Activity	Evaluation

Compliance Monitoring Dates/Times

Entry Date/Time (mm/dd/yyyy hh:mm):	09/01/2015 10:26	Exit Date/Time (mm/dd/yyyy hh:mm):	09/03/2015 14:55

Facility Representatives

Robert (Benny) Cole, Env. & Compliance Support 4, 423-753-1399 Timothy Wright, Manager, EH&S Generalist, 423-753-1323 Charles (Pepper) McCary, Senior Manager, EH&S Generalist, 423-753-1328 Ellen Shanks, Health & Safety Technician, 753-1241 Sandra Matthews, Administrative & Clerical Support, 423-753-1322	Wendell Christian, General Manager, 423-753-1200
On-Site Representative(s)Title, Phone Number	Responsible Official(s), Title, Phone Number

Statute and Section Information

Federal Statute:	CWA - Clean Water Act	State Statute:	Tennessee Water Quality Control Act
Programs:	NPDES- Base Program (Limits, Reporting, & Schedule)		
Compliance Monitoring Reason:	Core Program		
Compliance Monitoring Agency Type:	State	Agency Name:	TDEC - DWR
Did EPA assist/ Inspection?	No	Time Physically conducting activity: Days:	3 Hours:
Inspection Type:	State	Compliance Monitoring Action Outcome:	
Lead Agency:	State	Compliance Monitoring Rating Code:	Unrated
If Joint Inspection, what was the purpose of the other party?			

Areas Evaluated During Inspection (*Check only those areas evaluated*)

☒ Permit	☒ Self - Compliance Program	☐ Pretreatment
☒ Records / Records	☐ Compliance Schedule	☒ Pollution Prevention
☒ Facility Site Review	☐ Laboratory	☒ Storm Water
☒ Effluent / Receiving Waters	☒ Operations & Maintenance	☐ Combined Sewer Overflow
☐ Flow Measurement	☐ Sludge Handling / Disposal	☐ Sanitary Sewer Overflow

Compliance Monitoring Summary

Deficiencies noted with Pollution Prevention and Storm Water.

EPA and State Representatives		
Inspector's Signature	TDEC - DWR / JCEFO / 423-854-5456 Agency / Office / Phone	Oct 8, 2015 Date
Manager's Signature	TDEC - DWR / JCEFO / 423-854-5462 Agency / Office / Phone	Oct 8, 2015 Date

(Note: This form can only be printed to an XPS document, then saved for later use.)

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Water Resources
William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243
1-888-891-8332 (TDEC)

Tennessee Multi-Sector General NPDES Permit (TMSP) Compliance Inspection Report

Facility Name:	Aerojet Ordnance Tennessee			**NPDES Tracking Number: TNR**	TNR051099
Street Address:	1367 Old SR-34			County:	Washington
Facility SIC Code(s):	3369 -3451 - 3489 - 3499	TMSP Sector(s):	F - AA - - - -	Effective Date:	28-MAY-15
Inspection Date:	9/1/2015 - 9/3/2015	Time of Entry:	10:26 9/1/15	Time of Exit:	14:55 9/3/15

Notice of Coverage (NOC) and Stormwater Pollution Prevention Plan (SWPPP)	Yes	No	N/A
Is the facility's NOC retained on-site or available upon request?	☒	☐	☐
Has the facility developed and maintained a SWPPP?	☒	☐	☐
Does the SWPPP include: a detailed site map identifying drainage, outfalls, pollutant potential areas and BMPs	☒	☐	☐
an inventory of potential pollutant sources?	☒	☐	☐
a pollution prevention team?	☒	☐	☐
a list of measures and controls to prevent pollution?	☒	☐	☐
a description of good house keeping practices?	☒	☐	☐
a list of erosion prevention and sediment controls?	☒	☐	☐
a list of significant spills and leaks of toxic and hazardous pollutants?	☒	☐	☐
a description of spill prevention and response procedures?	☒	☐	☐
a certification page signed by the appropriate authority?	☒	☐	☐
a description of employee training and dates delivered?	☒	☐	☐
a certification of testing for presence of non-storm-water discharge?	☒	☐	☐

Quarterly Visual Examination of Stormwater Quality	Yes	No	N/A
Has the permittee performed quarterly visual examinations in accordance with the requirements of the TMSP?	☒	☐	☐
Are the visual examination reports retained on-site or available upon request?	☒	☐	☐

Stormwater Monitoring	Yes	No	N/A
Has the permittee performed stormwater monitoring at all of the outfalls?	☒	☐	☐
Have all of the required parameters been monitored?	☒	☐	☐
Have the samples been collected in accordance with the requirements of the TMSP and/or 40 CFR?	☒	☐	☐
Are the monitoring reports and associated documentation retained on-site or available upon request?	☒	☐	☐
Did the facility notify the Division within the required time frame if benchmark exceedances occurred?	☐	☐	☒

Comprehensive Site Compliance Evaluations and Inspections	Yes	No	N/A
Has the permittee performed annual comprehensive site compliance evaluations?	☒	☐	☐
Has the permittee performed any required site inspections?	☐	☒	☐
Are the evaluations and inspection records retained on-site or available upon request?	☒	☐	☐

Facility BMP Review	Yes	No	N/A
Are the site BMPs in accordance with the SWPPP?	☒	☐	☐
Have the BMPs been installed correctly and maintained?	☐	☒	☐
Have good housekeeping measures been implemented and maintained?	☐	☒	☐

Outfall and Receiving Waters (where applicable)	Outfall # A, B	Outfall # C
Was an outfall discharging at time of inspection? If yes, explain observations (source/color/odor/foam/scum/solids etc.).	NO NO	NO
Condition of receiving water upstream from the outfall?	CLOUDY/OK	CLOUDY/OK	OK/CLOUDY
Condition of receiving water 6 feet downstream of the outfall?	CLOUDY/OK	OK/CLOUDY	OK/CLOUDY
Condition of receiving water ____ feet downstream of the outfall?			

Observations and Comments:

SEE REPORT.

On-Site Contact Person:	DWR Inspector:
Print Name: Tim Wright	Print Name: Bryan B. Carter
Title: Manager, EH&S Date: 9-3-15	Title: TDEC – EPS 3 Date: 9/3/2015
Signature: Tim Wright	Signature:
Phone: 423-753-1323	Phone: 423-854-5456
Email: Timothy.Wright@rocket.com	Email: Bryan.Carter@tn.gov

AEROJET ORDNANCE TENNESSEE
EFFLUENT OBSERVATIONS

DATE: 9/1/2015 **COMMENTS:** Outfall observations by BBC

OUTFALL NUMBER	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	VISIBLE FLOATING SOLIDS	COLOR	OTHER
001	No process WW discharge at time of inspection						Process wastewater discharge (batch)
002	No	No	Slight	Small patches	No	None/clear	NCCW discharge
003	No	No	No	No	No	None/clear	Sanitary WWTP discharge
SW A	No flow at time of inspection						
SW B	No flow at time of inspection						
SW C	No flow at time of inspection						